

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Dalton Corporation
Kendallville Manufacturing Facility
200 West Ohio Street
Kendallville, Indiana 46755**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Permit Modification No.: 113-16474-00004 of Source Modification No.: 113-12446-00004, Issued on April 12, 2001	
Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 5, 2003

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry.

Responsible Official: Director of Operations
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
General Telephone No.: 260-347-1820
SIC Code: 3321 (Gray and Iron Foundries)
County Location: Noble
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source under PSD Rules;
Major Source, Section 112 of the Clean Air Act;
1 of the 28 Listed Source Categories (Secondary Metal Production)

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with the triethylamine (TEA) emissions controlled by a scrubber, and exhausting to stack T. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

- (a) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
- (b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack T;
- (c) The core wash dip tanks, with emissions exhausting inside the building;
- (d) Two (2) natural gas fired core drying ovens;
- (e) One (1) natural gas fired double core drying oven; and
- (f) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result an increased utilization of the existing sand muller #1, the existing core sand handling system, and the existing core wash dip tanks.

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On June 30, 2000, Dalton Corporation Kendallville Manufacturing Facility (here after referred to as Dalton) submitted an application to the OAQ requesting to add a new Isocure core machine to their existing plant. An interim permit to construct the new core machine was approved on November 22, 2000 and became effective on December 3, 2000. The source was also issued a permit, identified as Significant Source Modification 113-11488-00004, to construct and operate another core machine, identified as core machine #16, on November 23, 1999. The approval for core machine #16 included limits for VOC emissions in order to render the requirements of PSD not applicable. Dalton has agreed that the construction of these two core machines should now be considered as one single modification for the purposes of PSD review. Dalton has requested limits on both machines sufficient to render the requirements of PSD not applicable. Therefore, it will be necessary to adjust the limits for core machine #16, that were previously set in Significant Source Modification 113-11488-00004. This new permit includes new limits for both core machines #16 and #33 in order to render PSD not applicable.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

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SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke the Significant Source Modification (SSM) 113-12446-0004 if construction is not commenced within eighteen (18) months after receipt of SSM 113-12446-0004 or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed. The Affidavit of Construction was submitted on April 17, 2001.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document. The Operation Permit Validation Letter was issued on May 31, 2001.

In the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.
- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the

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proposed Title V permit, and the Title V permit will issued after EPA review.

B.5 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification ~~[326 IAC 2-7-4(f)]~~~~[326 IAC 2-7-6(1)]~~~~[326 IAC 2-7-5(3)(C)]~~

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan ~~[326 IAC 2-7-5(1),(3) and (13)]~~ ~~[326 IAC 2-7-6(1) and (6)]~~ ~~[326 IAC 1-6-3]~~

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) upon startup of the new emission unit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as

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they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements not already legally required shall be implemented when operation begins. Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Pressure Gauge Specifications and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
[326 IAC 1-6]

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the Compliance Monitoring Plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this approval;
 - (3) The Compliance Monitoring Requirements in Section D of this approval;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared upon startup of the new emission unit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

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- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to reasonable response steps may constitute a violation of the approval.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports, and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of SSM 113-12446-00004 and ending on the last day of the reporting period. Reporting periods are based on calendar years.

C.15 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]

- (a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).
- (b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

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- (1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;
 - (2) The MACT standard or standards for the affected source categories included at the source are promulgated.
- (c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with the triethylamine (TEA) emissions controlled by a scrubber, and exhausting to stack 74. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

- (a) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
- (b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack T;
- (c) The core wash dip tanks, with emissions exhausting inside the building;
- (d) Two (2) natural gas fired core drying ovens;
- (e) One (1) natural gas fired double core drying oven; and
- (f) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result in an increased utilization of the existing sand muller #1, the existing core sand handling system, and the existing core wash dip tanks.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the core sand handling system shall not exceed 21.6 pounds per hour when operating at a process weight rate of 12.0 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 VOC, PM, PM10 and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The maximum TEA emissions for each of the core machines #16 and #33 shall not exceed 0.001 pounds per ton of core sand.
- (b) The total VOC emissions from each of the core machines #16 and #33 shall not exceed 1.059 pounds per ton of core sand.

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- (c) The PM emissions from the bin vent controlling the core sand handling process shall not exceed 1.354 pounds per ton of core sand.
- (d) The PM10 emissions from the bin vent controlling the core sand handling process shall not exceed 0.790 pounds per ton of core sand.
- (e) The VOC emissions from the South muller #1 shall not exceed 0.383 pound per ton of core sand.
- (f) The sand throughput to the South muller #1 shall not exceed 35,450 tons per 12 consecutive month period.
- (g) The core wash solvent used in the core wash dip tanks #16 and #33 shall contain no VOCs.
- (h) The sand throughput to the core machine #33 shall not exceed 7,000 tons per 12 consecutive month period.

Compliance with (a) above is equivalent to TEA emissions of less than 10 tons per year; therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply. Compliance with (c) and (d) above is equivalent to PM and PM10 emissions of 24 and 14 tons per year respectively; therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply. Compliance with (a), (b), (e), (f), (g), and (h) above is equivalent to less than 25 tons per year of VOC; therefore the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply.

This permit shall supersede Condition D.1.1 of Source Modification 113-11448-00004 issued on January 14, 2000 and Condition D.1.2 of Significant Source Modification 113-12446-00004, issued on April 12, 2001.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the acid scrubber, core sand handling system and bin vent filter.

Compliance Determination Requirements

D.1.4 Operation of Controls

- (a) In order to comply with D.1.1 and D.1.2(c) and (d), the bin vent filter for PM control shall be in operation and control emissions from the core sand loading system at all times that the core sand loading system is in operation.
- (b) In order to comply with D.1.2(a) and (b), the acid scrubber for triethylamine (TEA) control shall be in operation and control emissions from the core machines #16 and #33 at all times that the either core machine is in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee has performed testing, using methods as approved by the Commissioner, in order to show compliance with Condition D.1.2 of Part 70 Significant Source Modification 113-12446-00004, issued on April 12, 2001. The test results were validated by OAQ on August 12, 2002.

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Due to the test results, the table below is revised to incorporate the new emission factors:

Facility	Pollutants	Limits
core machine #33	TEA	0.001 pounds TEA per ton of core sand
	Total VOC	1.059 pounds total VOC per ton of core sand
South Muller #1	VOC	0.383 pound per ton of core sand

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the bin vent exhaust shall be performed once per shift during normal daylight hours when loading of the core sand silo occurs. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Bin Vent Filter Inspections

An inspection shall be performed each calendar quarter of the bin vent filter to the silo. All defective filters shall be replaced.

D.1.8 Broken or Failed Bin Vent Detection

In the event that filter failure of the bin vent has been observed, the failed unit and the associated process will be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.9 Scrubber Parametric Monitoring

The Permittee shall monitor and record the pressure drop, flow rate, and pH level of the scrubber, at least once per shift. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 0.5 to 3 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of 200 gallons per minute or a minimum flow rate established during the latest stack test. Unless operated under conditions for which the

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Compliance Response Plan specifies otherwise, the pH level shall be maintained at a maximum level of 4.5 or a maximum level established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop reading is outside of the normal range for any one reading, or the flow rate is below the normal minimum for any one reading, or the pH level is above the normal maximum for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rates, and pH levels shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the core machines. All defective scrubber parts shall be replaced.

D.1.11 Scrubber Failure

In the event that scrubber failure has been observed:

- (a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the bin vent exhaust once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.
- (c) To document compliance with Conditions D.1.2(f) and D.1.2(h), the Permittee shall maintain records of the sand throughputs to the mixer #1 and core machine #33. For all core wash solvents used in conjunction with the core wash dip tanks #16 and #33, the source shall keep the material safety data sheets (MSDS) or other documentation showing the VOC content of each solvent used.
- (d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the pressure drop, flow rate, and pH readings of the scrubber once per shift.
- (e) To document compliance with Conditions D.1.10, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.10 and the number and type of any parts replaced.

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- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 (f) and D.1.2(h) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Dalton Corporation Kendallville Manufacturing Facility
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
Source Modification No.: 113-12446-00004

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

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Permit Reviewer: Iryn Calilung

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation Kendallville Manufacturing Facility
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
Source Modification No.: 113-12446-00004
Facility: South Muller #1
Parameters: Sand throughput
Limit: 35,450 tons of sand per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to this report.

Permit Modification 113-16474-00004
Permit Reviewer: Iryn Calilung

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation Kendallville Manufacturing Facility
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
Source Modification No.: 113-12446-00004, as modified in SPM 113-16474-00004
Facility: Core Machine #33
Parameters: Sand throughput
Limit: 7,000 tons of sand per 12 consecutive month period

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Telephone: _____

Attach a signed certification to this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Significant Permit Modification (SPM) of a Part 70 Significant Source Modification (SSM)

Source Background and Description

Source Name:	Dalton Corporation, Kendallville Manufacturing Facility
Source Location:	200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address:	200 West Ohio Street, Kendallville, Indiana 46755
General Telephone Number:	260-347-1820
General Facsimile Number:	260-347-4363
Responsible Official:	Director of Operations
County:	Noble
SIC Code:	3321 (Gray and Iron Foundry)
Source Categories:	1 of 28 Listed Source Categories (Secondary Metal Production Plant) Major PSD Source Major Source, CAA Section 112
Significant Permit Modification No.:	113-16474-00004
Permit Reviewer:	Iryn Calilung

Public Notification

On December 20, 2002, the Office of Air Quality (OAQ) had a notice published in the News-Sun, Kendallville, Indiana, stating that Dalton Corporation, Kendallville Manufacturing Facility had applied for a permit modification to revise the emission limits specified for Core Machine #33, Core Machine #16 and South Muller #1. The request is due to the tests made on these units. The notice also stated that OAQ proposed to issue a permit for this modification and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The OAQ did not receive any comments from the applicant and the public.

Proposed Changes

Upon further evaluation of Condition D.1.4(b), the OAQ removed the reference that the operation of the acid scrubber is necessary to comply with the sand production. The sand production is an independent requirement from the acid scrubber operation.

D.1.4 Operation of Controls

- (b) In order to comply with D.1.2(a) and (b) ~~and (h)~~, the acid scrubber for triethylamine (TEA) control shall be in operation and control emissions from the core machines #16 and #33 at all times that the either core machine is in operation.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Modification (SPM) of a Part 70 Significant Source Modification (SSM)

Source Background and Description

Source Name:	Dalton Corporation, Kendallville Manufacturing Facility
Source Location:	200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address:	200 West Ohio Street, Kendallville, Indiana 46755
General Telephone Number:	260-347-1820
General Facsimile Number:	260-347-4363
Responsible Official:	Director of Operations
County:	Noble
SIC Code:	3321 (Gray and Iron Foundry)
Source Categories:	1 of 28 Listed Source Categories (Secondary Metal Production Plant) Major PSD Source Major Source, CAA Section 112
Significant Permit Modification No.:	113-16474-00004
Permit Reviewer:	Iryn Calilung

History

On April 12, 2001, Dalton Corporation Kendallville Manufacturing Facility was issued a Part 70 Significant Source Modification (SSM 113-12446-00004) for the construction and operation of an Isocure core machine, identified as Core Machine #33, with a maximum capacity of 3 tons of core per hour, its Triethylamine (TEA) emissions controlled by a scrubber. The operation of the Core Machine #33 expected an increase in utilization of the existing Core Machine #16 and South Muller #1, thus when the emission factors (EFs) and annual sand throughput were specified, the increase in utilization was taken into account.

In this SSM approval, TEA and VOC emissions for the Core Machines #33 and #16, and South Muller #1 were specified such that the requirements of 326 IAC 2-2(PSD), 326 IAC 8-1-6 (State BACT) and 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply. A compliance testing requirement was also specified to validate the EFs of TEA and VOC. Based on the tests performed on January 15, 2002, the test results showed a difference in the EFs. This was anticipated because during the initial permitting review, the Office of Air Quality (OAQ) realized that there are no established standard EFs for TEA and VOC emissions in core making operation and that the EFs used are the best estimates available at the time of review . The test results were validated by the OAQ staff on July 14, 2002.

Detailed Description of Proposed Project

On November 18, 2002, the OAQ received an application from Dalton Corporation Kendallville Manufacturing Facility to revise the emission limits specified for the Core Machine #33, Core Machine #16 and South Muller #1. This request is due to the tests made on these units. The application is for the following changes:

In the Core Machines #33 and #16:

- (1) Change the total VOC EF from 0.49 to 1.059 pounds per ton of core sand. The new VOC EF is higher, however, evaluations of the other EFs and sand throughputs will be made to make sure that no applicable requirements will be violated.
- (2) Change the TEA EF from 0.252 to 0.001 pound per ton of core sand. The new EF is less than the specified TEA EF. This TEA EF is the rate after the scrubber.
- (3) Add an annual core sand limitation of 7,000 tons/year for Core Machine #33 to keep the 326 IAC 2-2 (PSD), 326 IAC 8-1-6 (State BACT) and 326 IAC 2-4.1-1 (New Source Toxic) requirements not applicable. No previous annual throughput limitation that is more stringent than the maximum capacity that was specified.

In the South Muller #1:

- (4) Change the VOC EF from 0.65 to 0.383 pound per ton of core sand. The new EF is clearly less than the existing VOC EF.
- (5) Maintain the annual core sand limitation of 35,450 tons per year. Even though the new VOC EF is less, this annual sand throughput is going to be maintained to compensate the increase in VOC EF of the other 2 core machines.

There is no change in the other limits and emission factors. There is also no new emitting units being constructed in this permit modification. It is limited to changing the emission factors. The main purpose of this application is to revise the existing permit to incorporate the new EFs and still assures that state and federal rules are not being violated.

Table 1 below shows the existing limits and the revisions for easy comparison.

Table 1			
Operation /Limits		SSM 113-12446-00004 issued on April 12, 2001	SPM 113-16474-00004 (proposed changes)
Core Machine #33 and Core Machine #16 (each)	Total VOC (lbs per ton of core sand)	0.49	1.059
	TEA (lbs per ton of core sand)	0.252	0.001
	Annual Sand Limit (tons/year)	Maximum Capacity	7,000
	Control	Scrubber for TEA Emissions	
South Muller #1	Total VOC (lbs per ton of core sand)	0.65	0.383
	Annual Sand Limit (tons/year)	35,450	

Detailed calculations are in Tables 2 and 3.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air

pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Since the intention of this permit modification is to reflect the accurate EFs for VOC and TEA emissions in the Core Machines #33 and #16, and the South Muller #1, there is no need to revisit all the previous emission calculations. Re-calculations will be limited to the PTE of unit that the EFs are being changed.

Table 2 shows the comparison of Limited PTE of VOC due to change in EFs.

Table 2						
Operation	Maximum Capacity (tons/hour)	Limited Capacity (tons/year)	Old E F (lb/ton of core sand)	New E F (lb/ton of core sand)	Old PTE (tons/year)	New PTE (tons/year)
Core Machine #33	3	7,000	0.49	1.059	6.4	3.71
Core Machine #16	3		0.49	1.059	6.4	13.91
South Muller #1	12	35,450	0.65	0.383	11.52	6.79
Total					24.32	24.41
Methodology	Core Machines #33 and #16: Old VOC PTE = (Old EF lb/ton)(Maximum Capacity tons/hour) (8760 hr/year)(1 ton/2000 lbs) New VOC PTE = (New EF lb/ton)(Limited Capacity tons/year)(1 ton/2000 lb)					
	Sand limit is now necessary for Core Machine #33 to be specified such that 326 IAC 2-2, 326 IAC 8-1-6 and 326 IAC 2-4.1-1 do not apply.					
Conclusion	South Muller #1 Old VOC PTE = (Old EF lb/ton)(Limited Capacity ton/year)(1 ton/2000 lb)					
	The change in EFs with corresponding annual sand limitations maintains the total limited VOC PTE as originally intended in the SSM 113-12446-00004, issued on April 12, 2001.					

Table 3 shows the comparison of the Limited PTE of TEA due to change in EFs.

Table 3						
Operation	Maximum Capacity (tons/hour)	Limited Capacity (tons/year)	Old EF (lb/ton of core sand)	New EF (lb/ton of core sand)	Old PTE (tons/year)	New PTE (tons/year)
Core Machine #33	3	7,000	0.252	0.001	3.31	0.0035
Core Machine #16	3				3.31	0.013
Total					6.62	0.0162
Methodology	Old TEA PTE = (Old EF lb/ton)(Maximum Capacity tons/hour) (8760 hr/year)(1 ton/2000 lbs) New TEA PTE = (New EF lb/ton)(Limited Capacity tons/year)(1 ton/2000 lb)					
Conclusion	It is evident that the new EFs satisfy the original intention of the SSM 113-12446-00004, issued on April 12, 2001.					

Justification for Modification

The Part 70 Significant Source Modification (SSM 113-12446-00004, issued on April 12, 2001) is being modified through a Significant Permit Modification (SPM), under the provisions of 326 IAC 2-7-12 because the application requires changes in the case by case determinations of emission limits.

County Attainment Status

The source is located in Noble County. Table 4 shows the attainment status of Noble County.

Table 4	
Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(1) Volatile organic compounds (VOC) and Ozone

VOC are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(2) Criteria Pollutants

Noble County has been classified as attainment or unclassifiable for all the other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(3) Fugitive Emissions

Since this type of operation is one of the 28 listed source categories under 40 CFR Part 52.21(b)(i)(c)(iii)(s) and 326 IAC 2-2-1(y)(1)(T) and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

- (1) Dalton Corporation Kendallville Manufacturing Facility is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories (Secondary Metal Production). This major status is based upon issued permits and existing enforceable potential to emit.
- (2) Dalton Corporation Kendallville Manufacturing Facility submitted a Part 70 permit

application on August 30, 1996. A notice of completeness was mailed to the source on October 29, 1996. The Part 70 permit has not yet been issued and is still under review by the OAQ.

Federal Rule Applicability

(1) New Source Performance Standards (NSPS)

There is still no NSPS (326 IAC 12 and 40 CFR Part 60) applicable to the core making process.

(2) National Emission Standards for Hazardous Air Pollutants (NESHAP)

There is still no NESHAP (326 IAC 14, 40 CFR Part 61, and 40 CFR Part 63) applicable to the core making process.

(3) Section 112(j) of the Clean Air Act (CAA)

Dalton Corporation is consider a major source for HAPs because it has HAPs PTE of greater than 10 tons/year for a single HAP and 25 tons/year for any combination.

Dalton Corporation submitted their Part 1 application on May 15, 2002. This source requested for a CAA section 112(j) application determination on some processes of the plant.

The NESHAP 40 CFR Part 63 Subpart EEEEE for iron foundries is tentatively scheduled to be drafted for the fiscal year 2003. For updated status of this, the applicant may refer to the following website: <http://www.epa.gov/ttn/atw/eparules.html>

Based on the Section 112(j) Part 2 MACT application requirement, the following condition will be added to this SPM:

C.15 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]

(a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).

(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;

(2) The MACT standard or standards for the affected source categories included at the source are promulgated.

(c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit

with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:
Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
and
United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(4) Prevention of Significant Deterioration (PSD) 40 CFR 52.21

This proposed modification is not subject to PSD review and requirements because the status of the original SSM was maintained even with the changes in EFs. Limited PTE was maintained to be less than the VOC PSD Significant level.

State Rule Applicability

There are no changes or addition of state rule requirements.

Compliance Requirements

There are no changes in the compliance monitoring.

Testing Requirements

As previously indicated, a compliance test was performed on January 15, 2002 and has been validated by OAQ on August 12, 2002. With this SPM, there will be no addition test requirements that will be specified to the Core Machines #33, and #16, and South Muller #1.

Proposed Permit Conditions

For emphasis, proposed changes to the SSM 113-12446-0004, issued on April 12, 2001, are shown in strike out and bold.

(1) Condition D.1.2 is revised as follows to incorporate the new EFs:

D.1.2 VOC, PM, PM10 and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]
In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The maximum TEA emissions for each of the core machines #16 and #33 shall not exceed ~~0.252~~ **0.001** pounds per ton of core sand.
- (b) The total VOC emissions from each of the core machines #16 and #33 shall not exceed ~~0.49~~ **1.059** pounds per ton of core sand.
- (c) The PM emissions from the bin vent controlling the core sand handling process shall not exceed 1.354 pounds per ton of core sand.

- (d) The PM10 emissions from the bin vent controlling the core sand handling process shall not exceed 0.790 pounds per ton of core sand.
- (e) The VOC emissions from the South Muller #1 shall not exceed ~~0.65~~ **0.383** pound per ton of core sand.
- (f) The sand throughput to the South Muller #1 shall not exceed 35,450 tons per 12 consecutive month period.
- (g) The core wash solvent used in the core wash dip tanks #16 and #33 shall contain no VOCs.
- (h) **The sand throughput to the core machine #33 shall not exceed 7,000 tons per 12 consecutive month period.**

Compliance with (a) above is equivalent to TEA emissions of less than 10 tons per year; therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply. Compliance with (c) and (d) above is equivalent to PM and PM10 emissions of 24 and 14 tons per year respectively; therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply. Compliance with (a), (b), (e), (f), ~~and (g), and (h)~~ above is equivalent to less than 25 tons per year of VOC; therefore the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply.

This permit shall supersede Condition D.1.1 of Source Modification 113-11448-00004 issued on January 14, 2000 and **Condition D.1.2 of Significant Source Modification 113-12446-0004, issued on April 12, 2001.**

- (2) Condition D.1.4 is revised by correcting the title of the condition, and referencing the new annual sand limit of the Core Machine #33.

D.1.4 Particulate Matter (PM) Operation of Controls

- (a) In order to comply with D.1.1 and D.1.2(c) and (d), the bin vent filter for PM control shall be in operation and control emissions from the core sand loading system at all times that the core sand loading system is in operation.
- (b) In order to comply with D.1.2(a), ~~and (b) and (h)~~, the acid scrubber for triethylamine (TEA) control shall be in operation and control emissions from the core machines #16 and #33 at all times that the either core machine is in operation.

- (3) Condition D.1.5 is revised as follows to indicate that testing has been performed:

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within 60 days after core machine #33 achieves maximum production rate, but no later than 180 days after initial start-up the Permittee shall perform testing as shown in the following table, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.2. Testing shall be conducted in accordance with Section C - Performance Testing.~~

The Permittee has performed testing, using methods as approved by the Commissioner, in order to show compliance with Condition D.1.2 of Part 70 Significant Source Modification 113-12446-0004, issued on April 12, 2001. The test results were validated by OAQ on August 12, 2002.

Due to the test results, the table below is revised to incorporate the new emission factors:

Facility	Pollutants	Limits	
core machine #33	TEA	0.252	0.001 pounds TEA per ton of core sand
	Total VOC	0.49	1.059 pounds total VOC per ton of core sand
South Muller #1	VOC	0.65	0.383 pound per ton of core sand

- (4) Condition D.1.12 (c) is revised to require the record keeping of the annual sand throughput limit in Core Machine #33.

D.1.12 Record Keeping Requirements

- (c) To document compliance with Conditions D.1.2(f) **and D.1.2(h)**, the Permittee shall maintain records of the sand throughputs to the mixer #1 and **core machine #33**. For all core wash solvents used in conjunction with the core wash dip tanks #16 and #33, the source shall keep the material safety data sheets (MSDS) or other documentation showing the VOC content of each solvent used.

- (5) Condition D.1.13 is revised to require the reporting of the annual sand throughput limit in Core Machine #33.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 (f) **and D.1.2(h)** shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

- (6) A reporting form has been added:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation Kendallville Manufacturing Facility
 Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
 Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
 Source Modification No.: 113-12446-00004, as modified in SPM 113-16474-00004
 Facility: Core Machine #33
 Parameters: Sand throughput
 Limit: 7,000 tons of sand per 12 consecutive month period

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
 9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____
Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Telephone: _____

Attach a signed certification to this report.

- (7) Due to recent changes to the 326 IAC 6-3-2, Condition D.1.1. There is no change in emission rate and compliance monitoring.

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the allowable ~~PM~~ **particulate** emission rate from the core sand handling system shall not exceed 21.6 pounds per hour when operating at a process weight rate of 12.0 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (8) A typographical error is corrected in Condition D.1.3.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B ~~C~~ - Preventive Maintenance Plan, of this permit, is required for the acid scrubber, core sand handling system and bin vent filter.

- (9) Typographical errors are corrected in Conditions D.1.7 and D.1.10.

D.1.7 Bin Vent Filter Inspections

An inspection shall be performed each calendar quarter of the bin vent filter to the silo. All defective filters shall be replaced.

D.1.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the core machines. All defective scrubber parts shall be replaced.

- (10) Clarification is being made to Condition B.3.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke ~~this approval~~ the **Significant Source Modification (SSM) 113-12446-00004** if construction is not commenced within eighteen (18) months after receipt of ~~this approval~~ **SSM 113-12446-00004** or if construction is suspended for a continuous period of one (1) year or more.

- (11) On April 19, 2001, the OAQ received the Affidavit of Construction for the SSM 113-12446-00004, issued on April 12, 2001. The Operation Permit Validation was mailed on May 31, 2001. Based on this information, the requirements under B.4 has been fulfilled and revised as follows:

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed. **The Affidavit of Construction was submitted on April 17, 2001.**
 - (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document. **The Operation Permit Validation Letter was issued on May 31, 2001.**
- (12) Clarification is being made to Condition C.14(d).
- C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]
- (d) The first report shall cover the period commencing on the date of issuance of ~~this approval~~ **SSM 113-12446-00004** this approval and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- (13) Lastly, the responsible official have been changed from General Manager to Director of Operations.

Recommendation

Based on the based on the facts, conditions and evaluations made, OAQ recommends to the IDEM Commissioner that the preliminary findings in the Significant Permit Modification (SPM) of the Part 70 Significant Source Modification 113-12446-00004 be provided to the public for review.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 18, 2002.

The applicant has provided a copy of the application to the Kendallville Public Library, 126 West Rush Street, Kendallville, IN 46755, Telephone: 260-347-2768.

The source is located within 50 miles adjacent to Michigan and Ohio.

Conclusion

In summary, the following conditions have been revised in the attached proposed SPM 113-16474-00004: A.1 B.3, B.4, C.14, D.1.1, D.1.2, D.1.3, D.1.4, D.1.5, D.1.7, D.1.10, D.1.12, D.1.13 and Quarterly Reporting Form.